## A New Species and a New Combination in Salpichroa (Solanaceae)

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ABSTRACT. A monographic study of the genus Salpichroa revealed a new species, S. microloba, and one taxon with a new status, S. glandulosa subsp. weddellii. These taxa are discussed and information on their probable relationships is given.

Salpichroa glandulosa (Hooker) Miers subsp. weddellii (Benoist) Keel, stat. et comb. nov. Basionym: Salpichroa weddellii Benoist, Bull. Soc. Bot. France 85: 408. 1938. TYPE: Bolivia. Cochabamba: between Llave and Morochata, Dec. 1846 (fl), Weddell 4116 (holotype, P; isotypes, P—2 sheets).

A study of the genus Salpichroa (Keel, 1984) gave clear indication that S. glandulosa consists of two subspecies, Salpichroa glandulosa subsp. weddellii and S. glandulosa subsp. glandulosa, that are similar in growth habit, habitat preference, and many aspects of morphology. The morphological characters that distinguish subspecies weddellii from subspecies glandulosa include (1) absence of teeth between the sinuses of the corolla lobes and (2) long pedicels with calyx bases that do not enlarge after fruiting. The two taxa, representing populations separated geographically by the Cordillera Tres Cruces in Bolivia, are best treated as vicariant subspecies.

Salpichroa microloba Keel, sp. nov. TYPE: Peru. Lima: Arquircancha, near Lachaqui, 3,658 m, 2 Feb. 1979 (fl, fr), Keel & Vilcapoma 397 (holotype, NY; isotypes, MO, USM). Figure 1.

Frutices penduli vel effusi ad 1 m alti. Rami et ramuli interdum flexuosi. Folia ovata vel elliptica; petioli subfiliformes vel complanati. Flores flavi vel viridi-flavescentes. Pedicelli filiformes. Calyx profunde 5-partitus, lobis linearibus, apice acutis vel attenuatis, connatis solum basi. Corolla 5-lobata, tubulosa, tubo recto vel apicem versus leviter dilatato, sed constricto ad faucem, lobis aestivatione valvatis, triangulatis vel ovato-triangulatis, apice acutis, ciliatis, sub anthesi per 180° reflexis. Stamina prope tubi apicem inserta. Stylus glaber, leviter exsertus vel tubum aequans, stamina excedens, stigmate subcapitato vel capitato. Bacca cyanea vel purpurea.

Pendent or straggling shrubs to 1 m tall, the young stems, leaves, and pedicels puberulous, pilose

or glabrous, sometimes with gland-tipped trichomes. Branches and twigs terete, flexuous, sometimes winged on 1 to 3 sides, each node occasionally with 2 to 4 semicircular or circular scales. Leaf blades ovate or elliptic,  $(1-)1.5-2.8(-3.6) \times (0.6-)1-$ 2.1(-3) cm; petioles subfiliform to flattened, 0.6-1.8 cm long. Pedicels filiform, 0.5-1.5 cm long; calyx deeply divided, the lobes linear, subequal, 5- $13 \times 0.5-2.5$  mm, ciliate, pilose, puberulous or glabrous, connate at the base, apex acute or attenuate; corolla tubular, yellow or yellowish green, the tube straight, slightly inflated on upper part, constricted at the throat,  $22-34 \times 3-7$  mm, glabrous or puberulous externally, glabrous internally, the lobes triangular or ovate-triangular, equal to subequal, valvate,  $2-3 \times 1.5-3$  mm, ciliate, apex acute, reflexed by 180° at anthesis; stamens included, equal or subequal, inserted at top 1/5 of the tube, the filaments 0.5-1.5 mm, glabrous, the anthers 2.5-4 mm; style nearly equal to the throat of corolla tube or slightly exserted, exceeding stamens, 2-3 cm long, glabrous, the stigma capitate or subcapitate, glabrous. Berry dark blue or purple, 3 cm long.

Distribution. Sub-puna or montane cloud forests, near creeks, in agricultural fields, hedgerows, on roadsides, grass steppes, or on stone walls, rock crevices; 2,400–3,800 m; in the Department of Cotopaxi, central Ecuador (one collection only) and west-central Peru. Flowering December–May, fruits found in February.

Salpichroa microloba shows slight variation in degree of pubescence and size of leaves. Cerrate & Tovar 1909 is exceptional for its large, glabrous leaves and wide corolla tubes. Salpichroa microloba and S. weberbaueri Dammer have nearly the same corolla length, but the shapes of corolla tubes and lobes, which are best seen in living plants, are very different. At anthesis, the corolla tube of S. microloba is constricted at its throat and the triangular or ovate-triangular corolla lobes are reflexed by 180°. The corolla tube of S. weberbaueri widens at the upper third of the tube; the lobes, from horizontally spreading to reflexed by 135° at anthesis, are triangular-lanceolate. In the field, one can easily sep-

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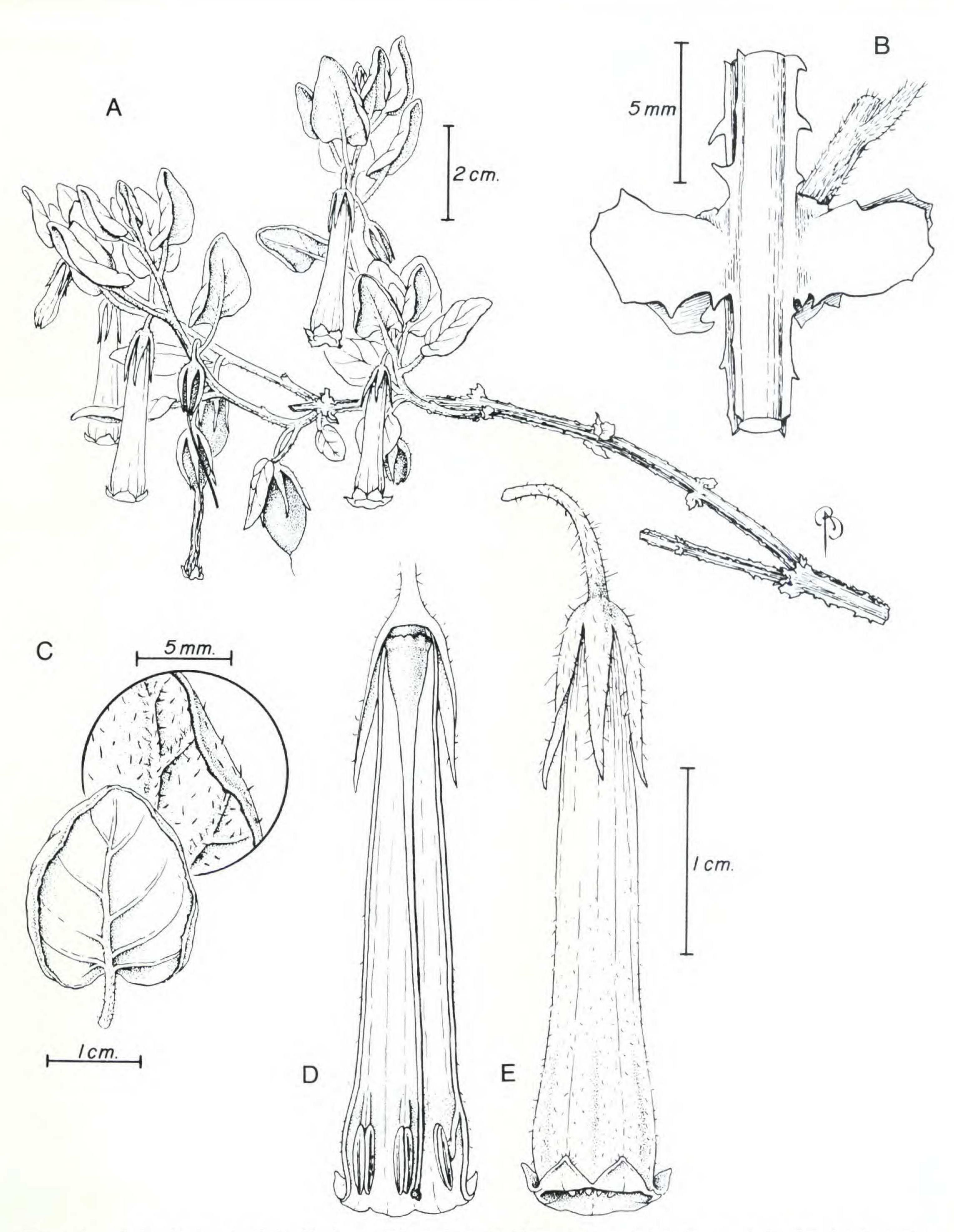


Figure 1. Salpichroa microloba Keel. —A. Branch. —B. Winged stem and scales. —C. Leaf and pubescence. —D. Internal view of flower. —E. External view of flower; note the small corolla lobes.

arate them by the shape of corolla and the degree of reflection of the corolla lobes at anthesis. The specific epithet, *microloba*, refers to the relatively small size of the corolla lobes compared to the tube.

Salpichroa microloba is probably most closely related to S. ramosissima Miers. Although the length of corolla tube of these two species is quite different (2.2–3.4 cm long in S. microloba, and 0.9–1.5 cm

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in S. ramosissima), the shape of corolla and the reflection angle of lobes at anthesis are similar.

Salpichroa microloba has been collected in central Ecuador, Department of Cotopaxi, and west-central Peru. Salpichroa ramosissima grows in the western part of central and southern Peru, and in southern Bolivia and northwestern Argentina. The ranges of the two species overlap in the Department of Lima, Peru.

Local names. Peru: Ayanata (Keel & Vilcapoma 397, Vilcapoma 129), Callalluma (Vilcapoma 130), Shuculumpa (Cerrate & Tovar 1909).

Paratypes. Ecuador. Cotopaxi: road Quevedo-Latacunga, above Pilaló, ca. 2,900 m, 3 May 1968 (fl), Harling et al. 8993 (GB, MO). Peru. Lima: Baños, on the way to Cerro de Pasco, Wilkes, 21-22 May 1839 (collecting date based on Wilkes, 1845) (fl) (US); Lachaqui, 3,800 m, 28 Dec. 1972 (fl), Vilcapoma 129 (US), 3,400 m, 29 Dec. 1972 (fl), Vilcapoma 130 (US); Pirocancha, on the way to Lachaqui, 3,440 m, 1 Feb. 1979 (fl, fr), Keel & Vilcapoma 390 (MO, NY, US, USM); Achaca, few km beyond Lachaqui, 3,658 m, 2 Feb. 1979

(fl, fr), Keel & Vilcapoma 396 (NY, USM); Matucana, 2,438 m, 14–18 Mar. 1923 (fl), Macbride 2946 (F); vic. of Huarochirí, western cordillera, 2,100–3,000 m, Hrdlicka, Feb. 1913 (fl) (US); vic. of Santiago, 3,600–3,700 m, 15 May 1953 (fl), Cerrate & Tovar 1909 (US).

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